

CIWQS Dischargers Users Guide

Appendix

Appendix A

Error Checks used to produce the Error Check Report

1. Narrative Check

Review of the Narrative requirements involves checking the *In Compliance?* field on the Narrative Tab and flagging any row that has “No” as an answer.

<i>Tab</i>	<i>Field</i>	<i>Check</i>	<i>Requirement</i>	<i>Results</i>
Narrative	In Compliance?	Any row that has “In Compliance?” as “No” is a non-compliance event.	<Narrative Requirement Text>	<Narrative Requirement Comments>

2. Numeric Checks

<i>Tab</i>	<i>Field</i>	<i>Check</i>	<i>Requirement</i>	<i>Results</i>
Pre-Calculated	Limit, Bound, Result	If bound is “<” and limit \geq result, this is a non-compliance event.	<Full text of requirement>	<Results>
Pre-Calculated	Limit, Bound, Result	If bound is “ \leq ” and the limit > result, this is a non-compliance event.	<Full text of requirement>	<Results>
Pre-Calculated	Limit, Bound, Result	If bound is “>” and the limit \leq result, this is a non-compliance event.	<Full text of requirement>	<Results>
Pre-Calculated	Limit, Bound, Result	If bound is “ \geq ” and the limit < result, this is a non-compliance event.	<Full text of requirement>	<Results>
Raw/EDF (Data Summary)	Limit, Bound, Calculated Result	If bound is “<” and limit \geq result, this is a non-compliance event.	<Full text of requirement>	<Results>
Raw/EDF (Data Summary)	Limit, Bound, Calculated Result	If bound is “ \leq ” and the limit > result, this is a non-compliance event.	<Full text of requirement>	<Results>
Raw/EDF (Data Summary)	Limit, Bound, Calculated Result	If bound is “>” and the limit \leq result, this is a non-compliance event.	<Full text of requirement>	<Results>
Raw/EDF	Limit, Bound,	If bound is “ \geq ” and the limit	<Full text of	<Results>

<i>Tab</i>	<i>Field</i>	<i>Check</i>	<i>Requirement</i>	<i>Results</i>
(Data Summary)	Calculated Result	< result, this is a non-compliance event.	requirement>	

Reporting Checks

<i>Tab</i>	<i>Field</i>	<i>Check</i>	<i>Requirement</i>	<i>Results</i>
Narrative	In Compliance?	There must be a value for each row.	Every narrative requirement must be shown to be in compliance, out of compliance, or N/A for this report.	One or more narrative requirements do not have a compliance status.
Narrative	Comments	For each row with “In Compliance?” of “No,” there must be a comment.	Each out of compliance narrative requirements must have a comment describing the action(s) taken/planned to return to compliance.	The following narrative requirement for monitoring location <monitoring location identifier> is out of compliance, but no comments were provided: <narrative requirement text>
Pre-Calculated	Limit	There must be a limit specified for each row.	Each pre-calculated requirement must specify a numeric limit.	The following pre-calculated requirement for monitoring location <monitoring location identifier> does not have a specified limit: <requirement text>
Pre-Calculated	Results	Results must be provided for each row.	Each pre-calculated requirement must have a result.	The following pre-calculated requirement for monitoring location <monitoring location identifier> does not have a specified result: <requirement text>
Pre-Calculated	Comments	For each row where the comparison of the limit and the result (based on the bound) yields a non-compliance	Each non-compliant pre-calculated requirement must have a comment describing the action(s)	The following pre-calculated requirement for monitoring location <monitoring location identifier> is out of

<i>Tab</i>	<i>Field</i>	<i>Check</i>	<i>Requirement</i>	<i>Results</i>
		event, there must be a comment.	taken/planned to return to compliance.	compliance, but no comments were provided: <requirement text>
Raw Data/EDF (Data Summary)	Result	A result must be entered on each line, unless the “non-detect” checkbox is checked.	All samples must specify a numeric result or must be marked as “non-detect.”	The sample on line <line number> for monitoring location <monitoring location> does not indicate non-detect and does not contain a numeric result.
Raw Data/EDF (Data Summary)	Non-Detect	Non-Detect can only be used if there is no numeric result.	Samples below the detection level (non-detect checked) must not indicate a numeric result.	The sample on line <line number> for monitoring location <monitoring location> does indicate non-detect and also shows a numeric result.
Raw Data/EDF (Data Summary)	Sample Date	Sample date is required.	A sample date is required for each sample.	The sample on line <line number> for monitoring location <monitoring location> indicates no sample date.
Raw Data/EDF (Data Summary)	Method Detection Limit	For each row marked as Non-Detect, the Method Detection Limit is required.	The method detection limit must be specified for each non-detect sample.	The sample on line <line number> for monitoring location <monitoring location> is marked as non-detect, but does not specify the method detection limit.
EDF	Units	Each row must specify units that are in the units reference table.	Uploaded data must be reported in units accepted by the system.	A sample was reported with units “<invalid units>.”
EDF	Units	The units must match the parameter.	Uploaded data must contain units that are compatible with the parameter.	A sample for “<parameter>” was reported in “<units>.”
EDF	Parameter	Each row must use a parameter from the reference table. No synonyms were found.	Uploaded data must specify parameters accepted by the system.	A sample was reported with parameter “<parameter>.”

<i>Tab</i>	<i>Field</i>	<i>Check</i>	<i>Requirement</i>	<i>Results</i>
EDF	Parameter	Each row must use a parameter from the reference table. The value is found as a synonym.	Uploaded data must specify parameters accepted by the system.	A sample was reported with parameter “<reported parameter>.” This is a synonym for “<official parameter>.” The same should be reported as “<official parameter>.”
Narrative, Pre-Calculated, Raw, EDF	All Fields	If a monitoring location is marked as No Discharge, but there is data in any other section for the monitoring location, this is a non-compliance event.	Monitoring locations without discharge should not have any data reported.	Data was reported for monitoring location <monitoring location>, which has been indicated as having no flow during this reporting period.
Raw/EDF (Data Summary)	Various	If there is insufficient raw data to compute a result, this is a non-compliance event.	Sufficient sample information must be provided for each non-pre-calculated limit.	There was insufficient information provided to evaluate the following limit: <requirement text>.
General	Report Due Date	If the due date is prior to today’s date, this is a non-compliance event. Note: until the report is submitted, the results of this check may not be correct and may indicate a false negative (i.e., no non-compliance event will be discovered).	This report was due on <due date>.	As of <today’s date>, this report has not been submitted.

Limit Bases

The system also runs through each numeric (limit) Requirement and attempts to locate the raw data in support of the results. The “limit basis” is used to run the calculation on the raw

data. If there is insufficient raw data to make the proper computation, this is shown as a “reporting” non-compliance event.

The limit basis, as indicated in the limitation requirement (Chapter 5), tells the system how to compute the “actual” value from raw data (submitted either via the raw data screen or via EDF). The following limit bases will be used to calculate from raw data:

<i>Limit Basis</i>	<i>Calculation</i>
Maximum Daily	The daily discharge (see definition below) is computed.
Average Monthly	The average (mean) of the daily discharge values (see definition below) for a given calendar month (first of the month to the last of the month) is computed. All values used to compute the mean will have the same month and year, but may have different days.
Average Weekly	The average (mean) of the daily discharge values (see definition below) for a given week (Sunday to Saturday) is computed. In a given month, there will be multiple week-periods. If the last week of the month doesn’t end of Saturday, the check is done in the following month. For example, September, 2004 ends on a Thursday. The weekly average for the last week of September is actually not computed until the end of the first week in October (which would not be reported until later). Note that if a permit starts mid-week, no values need to be submitted for that first week. A full week is required to have any values due.
Annual Average	The average (mean) of the daily discharge values (see definition below) for a given calendar year (January 1 to December 31) is computed.
(Rolling) 6-Month Median	The system will perform a series of calculations, one for each day in the monitoring period, that looks at the mean of the prior 180 days of data. There will be one “rolling” check per day in the period (e.g., for a monthly report with 31 days, there will actually be 31 separate “rolling” checks).
Instantaneous Maximum	“Instantaneous” is defined as a single sample value. No computation is performed, except for the comparison.
Instantaneous Minimum	“Instantaneous” is defined as a single sample value. No computation is performed, except for the comparison.

Additional Checks

“Daily Discharge” is either:

- The total mass of a pollutant discharged during a calendar day (when the units are of type “mass”) or
- The average (mean) measurement of the pollutant over the calendar day (when the units are of any type except “mass”)

Calendar day is defined as 12:00am (00:00:00) to 11:59 (23:59:59). Values in a single calendar day will have the same month, day, and year.

Therefore, if the units are of type “mass,” all sample measurements for a parameter are summed for a given day to calculate the daily discharge. For all other units, all sample measurements for a parameter are averaged (mean) for a given day to calculate the daily discharge.

All other limit bases will be required to be “pre-calculated” and will require the discharger to perform the “roll-up” calculations before submission.